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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,391	10/26/2001	Henricus Peter Maria Gubbels	NL 000605	4614

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER	
PERRY, ANTHONY T	

ART UNIT	PAPER NUMBER
2879	

DATE MAILED: 08/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	10/043,391	GUBBELS, HENRICUS PETER MARIA	
	Examiner	Art Unit	
	Anthony T Perry	2879	

. -- *The MAILING DATE of this communication appears on the cover sh et with the correspondence address* --

Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 June 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disp sition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☒ Claim(s) *7* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

Claim 7 is objected to because it includes essential subject matter enclosed within the parentheses. While reference characters corresponding to elements recited in the detailed description of the drawings and used in conjuction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses, so as to avoid confusion with other numbers or characters which may appear in the claims, essential subject matter should not be enclosed within parentheses since matter enclosed within parentheses do not constitute a limitation. See MPEP § 608.01(m).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juengst (US 5,352,952) in view of Huettinger et al. (US 6,181,065).

Regarding claims 1 and 5, Juengst discloses a metal halide lamp in Fig. 3 having a ceramic wall 6a which is closed at an end by a projecting plug 10. The lamp further comprises a

lead-through construction 21, 22 and 18 through the projecting plug 10 which extends from the end 17 of the projecting plug 10 to an electrode 11 arranged in the discharge vessel. Part 21 of the lead-through construction is directly fastened to the projecting plug 10 by means of a sintered joint (col. 5, lines 66-68). The plug extends over a length L, and the sintered joint has a length of 0.8L (col. 5, lines 6-15). The Juengst reference does not specifically teach at least part of the lead-through construction being cermet.

However, Huettinger teaches that the use of cermet lead-throughs provides a tight bond connection. The cermet lead-throughs which are directly sintered shrink during sintering. This permits a better matching of the cermet lead-throughs to the projecting plugs, which likewise, shrink. The thermal coefficients of expansion of the lead-throughs and projecting plugs are closer together than when the lead-throughs are metallic, which reduces stresses upon temperature change which results when the lamp is turned on and off (col. 2, line 63 – col. 3, line 12).

Accordingly, one of ordinary skill in the art at the time the invention was made would have found it obvious to have used cermet lead-throughs instead of metal lead-throughs, so as to reduce stresses upon temperature change which results when the lamp is turned on and off.

Regarding claim 3, Juengst teaches the sintered joint extending into the plug in a direction from the end to a distance of 0.5mm (col. 6, lines 34-37).

Regarding claim 6, the recitation, that the lamp has a power rating of at least 100W, has not been given patentable weight because it is considered an intended used recitation. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be

employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

Furthermore, Juengst teaches that typical operating power ratings are between 100 and 250W (col. 1, lines 27-28).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Juengst (US 5,352,952) in view of Huettinger et al. (US 6,181,065) as applied to claim 1 above, and further in view of Pabst et al. (US 5,075,587).

Regarding claim 4, Juengst and Huettinger fail to specifically teach the use of the cermet lead-through having a tapered shape adjacent the end and provided with a narrowed portion. However, Fig 3, of the Pabst reference discloses a lead-through 10' having such a shape and being provided with a narrow portion 16 so that a circular pocket is formed which permits the insertion of a sealing element 18 formed of solder and a component assisting in sintering.

Accordingly, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have made the cermet lead-through of the Huettinger reference in the shape of the lead-through disclosed by Pabst, so that a pocket is formed which permits the insertion of a sealing element formed of solder and a component assisting in sintering could be used.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Geijtenbeek et al. (US 6,147,453) in view of Huettinger et al. (US 6,181,065).

Regarding claim 7, Geijtenbeek teaches a high pressure discharge lamp provided with a discharge vessel with a ceramic wall 31 which is closed by a projecting plug 32b,35 through which a lead-through construction 51,50 extends from an end of the projecting plug 32b,35 to an

electrode 5 arranged in the discharge vessel 3 (see Fig. 2). Part 51 of the lead-through is made of a Mo—Al_2O_3 cermet.

Geijtenbeek discloses the claimed invention except for the limitation of the cermet consisting of 70% Al_2O_3 and 30% Mo. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering optimum or workable ranges involves only routine skill in the art. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide appropriate percentages of Mo and Al_2O_3, since optimization of workable ranges is considered within the skill of the art.

Geijtenbeek teaches using a melting-ceramic joint rather than directly sintering the lead-through to the projection plug. However, Huettinger teaches that use of such melts is unfavorable since they are corroded by aggressive components of the fill in discharge lamps, particularly the halides therein, so that the lifetime of such a lamp is rather short (col. 2, lines 6-9). For this reason, Huettinger suggests the use of a sealing means other than ceramic or glass melts (col. 2, lines 45-50). Huettinger further teaches that the use of cermet lead-throughs permits a tight bond connection without use of such melts by way of direct sintering (see col. 2, lines 63-66).

Accordingly, one of ordinary skill in the art would have found it obvious at the time the invention was made to have directly sintered the cermet lead-through, taught by Geijtenbeek, to the projecting plug instead of using a ceramic or glass melt, thereby extending the lifetime of the lamp.

Response to Arguments

Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Kelly et al. (US 6,528,945) teaches the use of a lead-through made of 70% Al_2O_3 and 30% Mo (col. 4, lines 20-25); and

Wei et al. (US 5,861,714) and Vida et al. (US 4,959,588) reads on claim 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Anthony Perry* whose telephone number is (703) 305-1799. The examiner can normally be reached between the hours of 9:00AM to 5:30PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (703) 305-4794. The fax phone number for this Group is (703) 308-7382.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [**Anthony.perry@uspto.gov**].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly

signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

VIP PATEL
PRIMARY EXAMINER

Anthony Perry
Patent Examiner
Art Unit 2879
July 31, 2003